|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Lymphatic drainage | Nerve | Vein | Artery | | | | Action  E=elevate  D-depress | Insertion | Origin | | Organ or muscle . |
|  | Mylohyoid nerve.  C1(component of hypoglossal nerve)  Facial nerve  Anterior belly, mandibular nerve.  Posterior belly, facial nerve. |  |  | | | | E- hyoid bone,Floor of mouth andtongue.  D-mandible  E- hyoid bone.  D/mandible  E- hyoid bone.  E- hyoid bone.  D-mandible. | Hyoid bone/ mylohyoid raphe.  Hyoid bone.  Hyoid bone  Intermediate tendon. | Mylohyod line.  Inferior genial tubercle.  Styloid process.  Anterior belly, digastric fossa of mandible.  Posterior belly, Mastoid notch. | | ***Muscles of the floor of the mouth***  1- Mylohyoid    2-Geniohyoid  3- Stylohyoid  4-Digastric |
|  | greater palatine and nasopalatie nerves from themaxillary division of the  trigeminal n  The lingual (common sensation), of the mandibular division of trigeminal  \*The taste fibers travel in the chorda tympani branch of the facial n |  |  | | | |  |  |  | | Mouth  -Root  Floor |
|  | buccal nerve, a branch of mandibular division of trigeminal nerve (the buccinator muscle is innervated by the buccal branch of the facial nerve) |  |  | | |  | |  |  | | Check |
|  |  |  |  | | | Alter the shape of the tongue | |  |  | | Muscles of the tongue  \* Intrinsic:  (Longitudinal  Transverse  Vertical)  \* Extrinsic muscles of the tongue |
|  | Hypoglossal nerve (XII) |  |  | | | Depresses, protrudes, and deviates the tongue to the opposite side. | | G/ Into the side of the tongue and hyoid bone | G/Sup. Genial tubercle of the mandible | | 1/Genioglossus |
|  | XII nerve |  |  | | | depresses the tongue | | side of tongue | hyoid bone | | 2/Hyoglossus, |
|  | XII nerve |  |  | | | pulls the tongue upward and back | | into side of the tongue | styloid process behind ear | | 3/Styloglossus |
|  | Pharyngeal plexus of vagus (X) nerve |  |  | | | pulls the tongue back to narrows the oropharyngeal ismuthus, Depresses the palate. | | Lateral surface of the back of the tongue | palatine aponeurosis | | 4/Palatoglossus. |
| Tip: Submental lymph nodes  Sides of the anterior two thirds: Submandibulr and deep cervical lymph nodes  Posterior third: Deep cervical lymph nodes | Sensory:  Gerneral sensation: Lingual nerve of mandibular of trigeminal.  \* Taste sensation: Chorda tympani (parasympathetic part of facial (VII) nerve. | Lingual vein drainage in I J V. | Lingual artery (which gives 2 dorsalis linguae and deep lingual),  Tonsillar branch of the facial artery Ascending pharyngeal artery | |  | | |  |  | | Tongue  Anterior 2/3: |
|  | (glossopharyngeal) nerve General and taste). |  |  | |  | | |  |  | | Posterior 1/3: IX |
|  | Internal  laryngeal n. (from X).  XII\*Hypoglossal \* to all muscles except palatoglossus(Pharyngeal plexus of vagus (X) nerve |  |  | |  | | |  |  | | Posterior end of the dorsum:  Motor: |
| Pre-auricular (parotid), superficial cervical and deep cervical lymph nodes. | Sensory ;  Auriculotemporal nerve.  Sympathetic  From the plexus around ECA  Parasympathetic : Otic ganglion. | Retromandibular vein. | External carotid artery & its terminal branches within the gland |  | | | |  |  | | Salivary gland  1/ Parotid gland |
| Submandibular lymph nodes.  Deep cervical lymph nodes especially jugulomohyoid | Sensory: Lingual nerve.  Sympathetic: Plexus around facial artery.  Parasympathetic:  Preganglionic fibres: Chorda tympani (VII)  Ganglion: Submandibular ganglion  Postganglionic fibres: Lingual | Facial and lingual veins. | Facial and lingual arteries. |  | | | |  |  | 2/ Submandibular | |
| Submental and submandibular lymph nodes into deep cervical lymph nodes. | Sensory:  Lingual nerve.  Sympathetic:  Plexus around lingual and facial arteries.  Parasympathetic:  Branches of submandibulr ganglion. | Lingual and facial veins | Sublingual branch of lingual artery.  Twigs from Submental artery. |  | | | |  |  | 3/ Sublingual salivary gland | |